



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY
AFFAIRS (PERA)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208

Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/building

NOTICE OF ACCEPTANCE (NOA)

Florida Storm Panels, Inc.
14475 NW 26th Avenue
Opa-Locka, Florida 33054

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: "HPMA / Performance System 2" Aluminum Accordion Shutter

APPROVAL DOCUMENT: Drawing No. AD10-28, titled "System 2 Aluminum Accordion Shutter", sheets 1 through 10 of 10, prepared by MCY Engineering, Inc., dated May 13, 2010, last revision #2 dated March 16, 2012, signed and sealed by Yiping Wang, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, the following statement: "Miami-Dade County Product Control Approved", and NOA number, per TAS-201, TAS-202, and TAS-203, unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA #10-0930.12 and consists of this page 1, evidence submitted pages E-1, E-2, E-3, E-4, E-5, & E-6 as well as approval document mentioned above.

The submitted documentation was reviewed by Helmy A. Makar, P.E., M.S.



Helmy A. Makar
04/19/2012

NOA No. 12-0326.11
Expiration Date: 04/23/2016
Approval Date: 04/19/2012

Florida Storm Panels, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 01-0328.02

A. DRAWINGS

1. *Drawing No. 01-069, titled "HPMA / Performance System 1 Accordion Shutter", sheets 1 through 6 of 6, prepared by Tilteco, Inc., dated March 26, 2001, signed and sealed by Walter A. Tillit Jr., P.E.*

B. TESTS

1. *See Association's generic approval number 01-0026.*

C. CALCULATIONS

1. *See Association's generic approval number 01-0026.*

D. MATERIAL CERTIFICATIONS

1. *See Association's generic approval number 01-0026.*

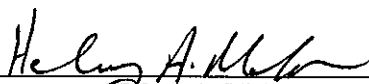
E. STATEMENTS

1. *Release letter issued by the Hurricane Protection Manufacturers Association, dated March 22, 2001, certifying this product to meet the criteria of product tested and approved, and allowing Florida Storm Panels & Accordions, Inc. to use the test results approved under Dade County Approval No. 01-0026, signed by Mr. Jeffry T. Robinson.*
2. *Acknowledgment letter by Florida Storm Panels & Accordions, Inc. dated March 22, 2001, signed by Mr. Victor V. Cruz.*
3. *Letter by Tilteco, Inc., dated March 27, 2001, certifying that the drawing (No. 01-069) prepared for Florida Storm Panels & Accordions, Inc., signed and sealed by Walter A. Tillit Jr., P.E., is engineering wise identical to Hurricane Protection Manufacturers Association, Inc. generic drawing (No. 00-120).*
4. *Acceptance Letter issued to Mr. Victor V. Cruz on April 16, 2001, and returned signed by Mr. Victor V. Cruz on April 16, 2001, indicating to please issue the proposed Notice of Acceptance as submitted and reviewed.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #02-1203.01

A. DRAWINGS

1. *Drawing No. 02-481, titled "Performance System 1 Accordion Shutter", sheets 1 through 6 of 6, prepared by Tilteco, Inc., dated October 14, 2002, last revision #1 dated October 14, 2002 signed and sealed Walter A. Tillit, Jr., P.E.*


Helmy A. Makar, P.E., M.S.
PERA, Product Control Unit Supervisor
NOA No. 12-0326.11
Expiration Date: 04/23/2016
Approval Date: 04/19/2012

Florida Storm Panels, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. MATERIAL CERTIFICATIONS

1. *None.*

E. STATEMENTS

1. *Letter issued by Mr. Walter A. Tillit, Jr., P.E., dated December 04, 2002, stating that the only change from the previous approved drawings is general note numbers 1 and 11.*

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #06-0105.03

A. DRAWINGS

1. *Drawing No. 05-344, titled " Performance System 1 Accordion Shutter ", sheets 1 through 6 of 6, prepared by Tilteco, Inc., dated November 11, 2005, last revision #1 dated November 11, 2005, signed and sealed by Walter A. Tillit Jr., P.E.*

B. TESTS

1. *See Association's generic approval under 05-0323.*

C. CALCULATIONS

1. *See Association's generic approval under 05-0323.*

D. QUALITY ASSURANCE

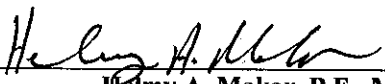
1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *See Association's generic approval under 05-0323.*

F. STATEMENTS

1. *Letter by Tilteco Inc., dated November 14, 2005, signed and sealed by Mr. Walter A. Tillit, Jr., P.E., certifying that the drawing (No. 05-344) prepared for Florida Storm Panels & Accordions, Inc. is engineering wise identical to HPMA's generic drawing (No. 05-118).*
2. *Acknowledgment letter by Florida Storm Panels & Accordions, Inc. dated December 14, 2005, signed and sealed by the Corporate Seal.*


Helmy A. Makar, P.E., M.S.
PERA, Product Control Unit Supervisor
NOA No. 12-0326.11
Expiration Date: 04/23/2016
Approval Date: 04/19/2012

Florida Storm Panels, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #07-0328.04

A. DRAWINGS

1. *Drawing No. 07-052, titled " Performance System 2 Accordion Shutter ", sheets 1 through 6 of 6, prepared by Tilteco, Inc., dated March 19, 2007, signed and sealed by Walter A. Tillit Jr., P.E., on March 21, 2007.*

B. TESTS

1. *See Association's generic approval under 07-2513.*

C. CALCULATIONS

1. *See Association's generic approval under 07-2513.*

D. QUALITY ASSURANCE

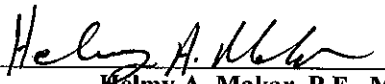
1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *See Association's generic approval under 07-2513.*

F. STATEMENTS

1. *Release letter issued by the Hurricane Protection Manufacturers Association, dated March 06, 2007, certifying this product to meet the criteria of product tested and approved, and allowing Florida Storm Panels & Accordions, Inc. to use the test results approved under Miami Dade County Approval No. 07-2513, signed by Mr. Henry Revilla.*
2. *Acknowledgment letter by Florida Storm Panels & Accordions, Inc. dated March 06, 2007, signed by Mr. Henry Revilla.*
3. *Letter by Tilteco Inc., dated March 21, 2007, signed and sealed by Mr. Walter A. Tillit, Jr., P.E., certifying that the drawing (No. 07-052) prepared for Florida Storm Panels & Accordions, Inc. is engineering wise identical to HPMA's generic drawing (No. 06-219).*
4. *Acceptance Letter issued to Mr. Henry Revilla on May 19, 2007 and returned signed by Mr. Henry Revilla on May 21, 2007, indicating to please issue the proposed Notice of Acceptance as submitted and reviewed.*


Helmy A. Makar, P.E., M.S.
PERA, Product Control Unit Supervisor
NOA No. 12-0326.11
Expiration Date: 04/23/2016
Approval Date: 04/19/2012

Florida Storm Panels, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

5. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #09-1028.08

A. DRAWINGS

1. *Drawing No. 09-042, titled " Performance System 2 Accordion Shutter ", sheets 1 through 10 of 10, prepared by Tilteco, Inc., last revision #1 dated March 19, 2009, signed and sealed by Walter A. Tillit Jr., P.E., on September 23, 2009.*

B. TESTS

1. *See Association's generic approval under 09-0645.*

C. CALCULATIONS

1. *See Association's generic approval under 09-0645.*

D. QUALITY ASSURANCE

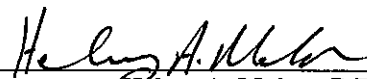
1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *See Association's generic approval under 09-0645.*

F. STATEMENTS

1. *Release letter issued by the Hurricane Protection Manufacturers Association, dated September 23, 2009, certifying this product to meet the criteria of product tested and approved, and allowing Florida Storm Panels & Accordions, Inc. to use the test results approved under Miami Dade County Approval No. 09-0645, signed by Mr. Henry Revilla.*
2. *Acknowledgment letter by Florida Storm Panels & Accordions, Inc. dated September 23, 2009, signed by Mr. Henry Revilla.*
3. *Letter by Tilteco Inc., dated September 23, 2009, signed and sealed by Mr. Walter A. Tillit, Jr., P.E., certifying that the drawing (No. 09-042) prepared for Florida Storm Panels & Accordions, Inc. is engineering wise identical to HPMA's generic drawing (No. 09-035).*



Helmy A. Makar, P.E., M.S.
PERA, Product Control Unit Supervisor
NOA No. 12-0326.11
Expiration Date: 04/23/2016
Approval Date: 04/19/2012

Florida Storm Panels, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

6. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 10-0930.12

A. DRAWINGS

1. *Drawing No. AD10-28, titled " System 2 Aluminum Accordion Shutter ", sheets 1 through 10 of 10, prepared by MCY Engineering, Inc., dated May 13, 2010, last revision #1 dated September 05, 2010, signed and sealed by Yiping Wang, P.E.*

B. TESTS

1. *See Association's generic approval under 10-0710.*

C. CALCULATIONS

1. *See Association's generic approval under 10-0710.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building and Neighborhood Compliance Department.*

E. MATERIAL CERTIFICATIONS

1. *See Association's generic approval under 10-0710.*

F. STATEMENTS

1. *Release letter issued by the Hurricane Protection Manufacturers Association, dated September 30, 2010, certifying this product to meet the criteria of product tested and approved, and allowing Florida Storm Panels, Inc. to use the test results approved under Miami Dade County Approval No. 10-0710, signed by Mr. Henry Revilla.*
2. *Acknowledgment letter by Florida Storm Panels, Inc. dated February 10, 2011, signed by Mr. Henry Revilla.*
3. *Letter by MCY Engineering, Inc., dated February 02, 2011, signed and sealed by Yipping Wang, P.E., certifying that the drawing (No. AD10-28) prepared for Florida Storm Panels, Inc. is engineering wise identical to HPMA's generic drawing (No. AD10-12).*
4. *Acceptance Letter issued to Mr. Henry Revilla on February 16, 2011 and returned signed by Mr. Henry Revilla on February 17, 2011, indicating to please issue the proposed Notice of Acceptance as submitted and reviewed.*


Helmy A. Makar, P.E., M.S.

PERA, Product Control Unit Supervisor

NOA No. 12-0326.11

Expiration Date: 04/23/2016

Approval Date: 04/19/2012

Florida Storm Panels, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

7. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. AD10-28, titled " System 2 Aluminum Accordion Shutter ", sheets 1 through 10 of 10, prepared by MCY Engineering, Inc., dated May 13, 2010, last revision #2 dated March 16, 2012, signed and sealed by Yiping Wang, P.E.*

B. TESTS

1. *See Association's generic approval under 12-0736.*

C. CALCULATIONS

1. *See Association's generic approval under 12-0736.*

D. QUALITY ASSURANCE

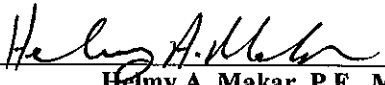
1. *By Miami-Dade County Department OF Permitting, Environment, and Regulatory Affairs (PERA).*

E. MATERIAL CERTIFICATIONS

1. *See Association's generic approval under 12-0736.*

F. STATEMENTS

1. *Release letter issued by the Hurricane Protection Manufacturers Association, dated March 19, 2012, certifying this product to meet the criteria of product tested and approved, and allowing Florida Storm Panels, Inc. to use the test results approved under Miami Dade County Approval No. 12-0736, signed by Mr. Henry Revilla.*
2. *Acknowledgment letter by Florida Storm Panels, Inc. dated March 19, 2012, signed by Mr. Henry Revilla.*
3. *Letter by MCY Engineering, Inc., dated March 19, 2012, signed and sealed by Yipping Wang, P.E., certifying that the drawing (No. AD10-28) prepared for Florida Storm Panels, Inc. is engineering wise identical to HPMA's generic drawing (No. AD10-12).*


Henry A. Makar, P.E., M.S.
PERA, Product Control Unit Supervisor
NOA No. 12-0326.11
Expiration Date: 04/23/2016
Approval Date: 04/19/2012

GENERAL NOTES:

1. THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2010 INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).
2. STAINLESS STEEL SHEET METAL SCREWS USED AT LOUVER PIN SHALL BE # 14 x 3", 410-HT MINIMUM SERIES W/ 135.0 ksi YIELD STRENGTH & 180 ksi TENSILE STRENGTH. SCREWS SHALL BE COATED WITH Xylan 5000 SERIES FLUOROPOLYMER COATINGS AS MANUFACTURED BY WHITFORD Co, BOX 507, WEST CHESTER PA. 19381.
3. ALL ALUMINUM EXTRUSIONS SHALL BE 6063-T6 ALLOY WITH MINIMUM YIELD STRENGTH OF Fy=31.0 ksi.
4. ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS. ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
5. ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.
6. WOOD BUCKS BY OTHERS MUST BE SOUTHERN PINE, G = 0.55 AND MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.
7. ALL ALUMINUM POP RIVETS TO BE 5052 ALUMINUM ALLOY WITH ALUMINUM MANDREL.
8. BOLTS TO BE GALVANIZED OR STAINLESS STEEL WITH 36 ksi MINIMUM YIELD STRENGTH.
9. SHUTTER'S COMPONENTS ARE PATENT PENDING.
9. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE WHERE SHUTTER IS TO BE ATTACHED TO INSURE PROPER ANCHORAGE. THIS SHUTTER SHALL ONLY BE ATTACHED TO CONCRETE, BLOCK OR WOOD FRAME BUILDINGS.
11. A PERMANENT SHUTTER MANUFACTURER'S LABEL SHALL BE PLACED ON THE EXPOSED SURFACE OF THE FEMALE CENTERMATE BLADE (COMPONENT H). ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABEL SHALL READ AS FOLLOWS:

FLORIDA STORM PANELS, INC.
OPA LOCKA, FLORIDA
MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED.

12. (a) THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) PREPARED BY THIS ENGINEER IS GENERIC.
- (b) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT BASED ON THIS PRODUCT APPROVAL PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.
- (c) THIS PRODUCT APPROVAL DOCUMENT WILL BE CONSIDERED INVALID IF MODIFIED.
- (d) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.A.D. ENGINEER OF RECORD, ACTING AS DELEGATED ENGINEER TO THE P.A.D. ENGINEER, SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.
- (e) THIS P.A.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER THAT PREPARED IT.

TYPICAL ANCHORS: (SEE CHARTS FOR ANCHOR SPACING)

- TYPE A.** 1/4" DIA. ITW TAPCON BY ITW BUILDEX
Fu = 120 KSI, Fy = 92 KSI
INTO CONCRETE fc'=3000 PSI
1-3/4" MIN. EMBED
2-1/2" MIN. EDGE DISTANCE
- TYPE A1.** INTO CONCRETE BLOCK
1-1/4" MIN. EMBED
2-1/2" MIN. EDGE DISTANCE

- TYPE B.** 1/4"-20 CALK-IN BY 'POWERS' FASTENERS
INTO CONCRETE fc'=3000 PSI
7/8" MIN. EMBED
3" MIN. EDGE DISTANCE
- TYPE B1.** INTO CONCRETE BLOCK
7/8" MIN. EMBED
3" MIN. EDGE DISTANCE

- TYPE C.** 1/4" CRETE-FLEX SS4 MASONRY ANCHOR BY "ELCO" CONSTRUCTION PRODUCTS
Fu = 120 KSI, Fy = 92 KSI
INTO CONCRETE fc'=3000 PSI
1 3/4" MIN. EMBED
2 1/2" MIN. EDGE DISTANCE
- TYPE C1.** INTO CONCRETE BLOCK
1 1/4" MIN. EMBED
2 1/2" MIN. EDGE DISTANCE

NOTES:

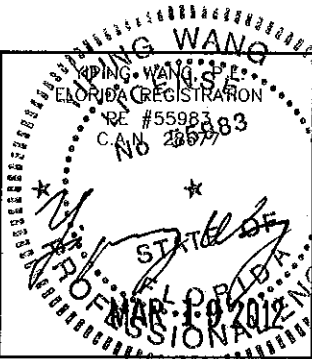
WHEN EDGE DISTANCE EQUAL OR GREATER THAN 2" AND LESS THAN MIN. EDGE DISTANCE SPECIFIED ABOVE THE ANCHOR SPACE IN ANCHOR CHARTS ON THE DRAWINGS MUST MULTIPLY BY FOLLOWING REDUCTION FACTOR:

- ANCHOR TYPE A, & A1: REDUCTION FACTOR = 0.77
ANCHOR TYPE B & B1: REDUCTION FACTOR = 0.50
ANCHOR TYPE C & C1: REDUCTION FACTOR = 0.77

PLEASE NOTE THIS INSTALLATION ARE ONLY VALID FOR THE RESULTING ANCHOR SPACE EQUAL OR GREATER THAN 3".

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0326.11
Expiration Date 4/23/2016
By: [Signature]
Miami Dade Product Control

MIAMI DADE COUNTY



REVISIONS	
NO.	DATE DESCRIPTION
1	08/05/10 AS PER BCCO COMMENTS
2	09/16/12 UPDATED TO FBC 2010

MCY

MCY ENGINEERING, INC.
GLAZING CONSULTANTS
8501 SW 124 AVE. STE 205A
MIAMI, FL 33183
P: 305.271.0117
F: 786.573.5063
www.MCYEngineering.com
MCY.Engineering@Att.net

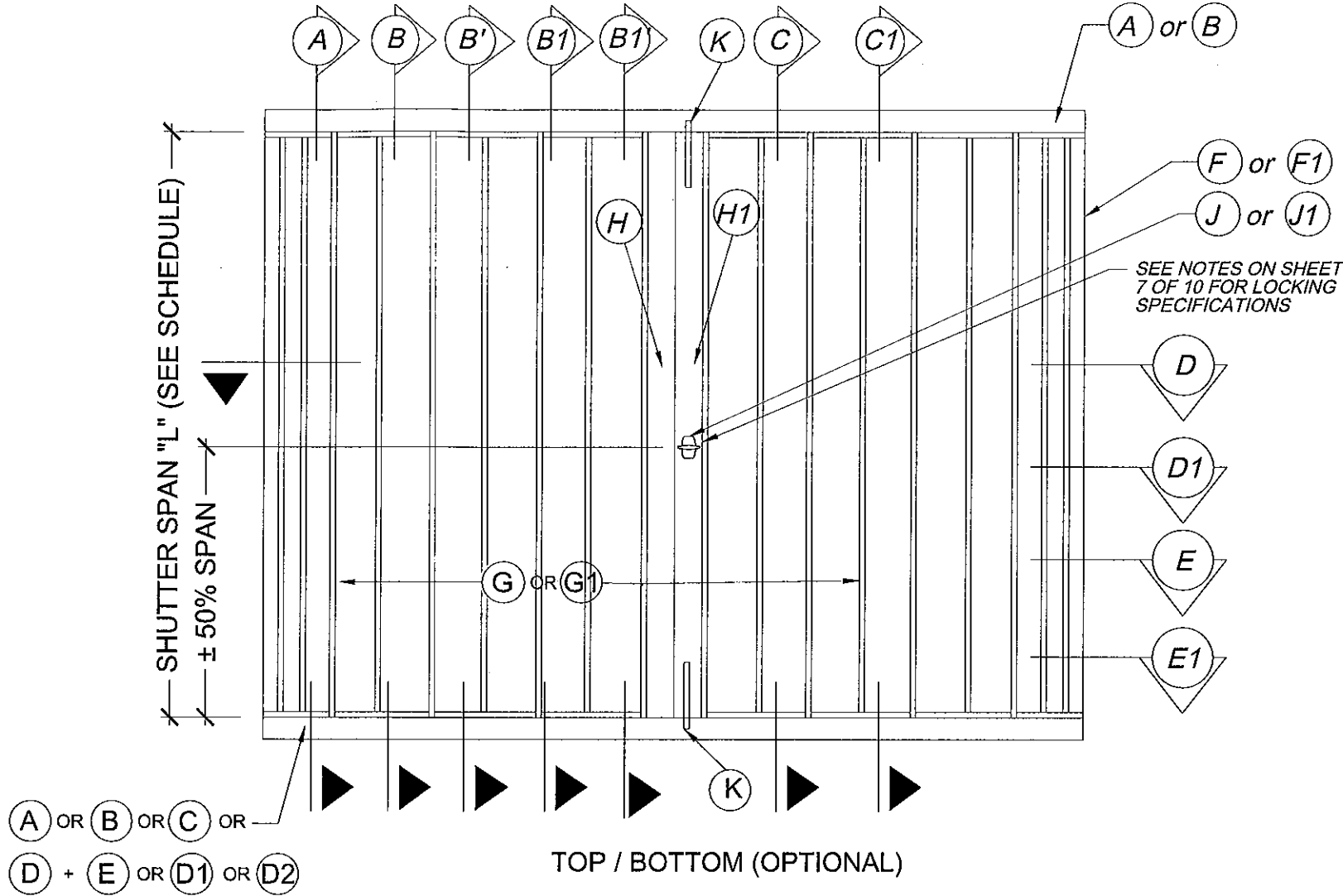
SYSTEM 2 ALUMINUM ACCORDION SHUTTER

FLORIDA STORM PANELS, INC.
(H.P.M.A. #2)
14475 NW 26 AVENUE
OPA LOCKA, FL 33054
Tel: (305) 685-9000 Fax: (305) 685-7511

DATE	05-13-2010
SCALE	
DRAWN BY	E.D.
PROJECT NO.	10-04
DRAWING NO.	AD10-28
1 OF 10	

MAXIMUM DESIGN PRESSURE RATING "Pd" (PSF)
AND CORRESPONDING MAXIMUM SPAN "L" SCHEDULE.

MAXIMUM DESIGN LOAD "Pd" (PSF)	MAXIMUM SHUTTER SPAN FOR ALL SECTIONS		MINIMUM SEPARATION TO GLASS (in.) ALL SECTIONS
	Max. PANEL LENGTH L+ (ft.)	Max. PANEL LENGTH L- (ft.)	
40	13'-2"	14'-1"	3.0
45	12'-9"	14'-1"	3.0
50	12'-5"	14'-1"	3.0
55	12'-2"	13'-5"	3.0
60	11'-11"	12'-10"	3.0
65	11'-8"	12'-4"	3.0
70	11'-5"	11'-11"	3.0
75	11'-3"	11'-6"	3.0
80	11'-1"	11'-2"	3.0
85	10'-10"	10'-10"	3.0
90	10'-6"	10'-6"	3.0
95	10'-3"	10'-3"	2.875
100	10'	10'	2.875
105	9'-9"	9'-9"	2.625
110	9'-6"	9'-6"	2.5
115	9'-4"	9'-4"	2.5
120	9'-1"	9'-1"	2.5
125	8'-10"	8'-10"	2.5
130	8'-6"	8'-6"	2.375
135	-	8'-2"	2.375
140	-	7'-11"	2.375
145	-	7'-7"	2.375
150	-	7'-4"	2.375
155	-	7'-2"	2.375
160	-	6'-11"	2.375
165	-	6'-8"	2.375
170	-	6'-6"	2.375
175	-	6'-4"	2.375
180	-	6'-2"	2.375
185	-	6'	2.375
190	-	5'-10"	2.375
195	-	5'-8"	2.375



INSTRUCTION:

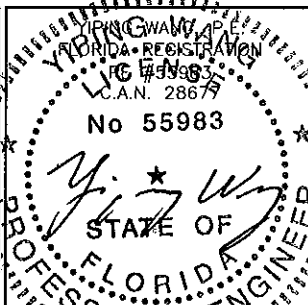
STEP 1 DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON VELOCITY, BUILDING HEIGHT, WIND ZONE USING APPLICABLY ASCE 7 STANDARD.

STEP 2 CHECK SHUTTER CAPACITY FOR A GIVEN SHUTTER SPAN USING CHARTS ON SHEET 3. MAX. DESIGN LOAD FROM CHART HAS TO BE GREATER THAN DESIGN WIND LOAD FROM STEP 1.

STEP 3 USING CHARTS ON SHEET 4 THRU SHEET 10 SELECT ANCHOR TYPE AND SPACING BASED ON DESIGN LOAD AND SHUTTER SPAN FOR THE ANCHOR DETAIL USED.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0326-11
Expiration Date 04/23/2013
By: [Signature]
Miami Dade Product Control

MIAMI DADE COUNTY



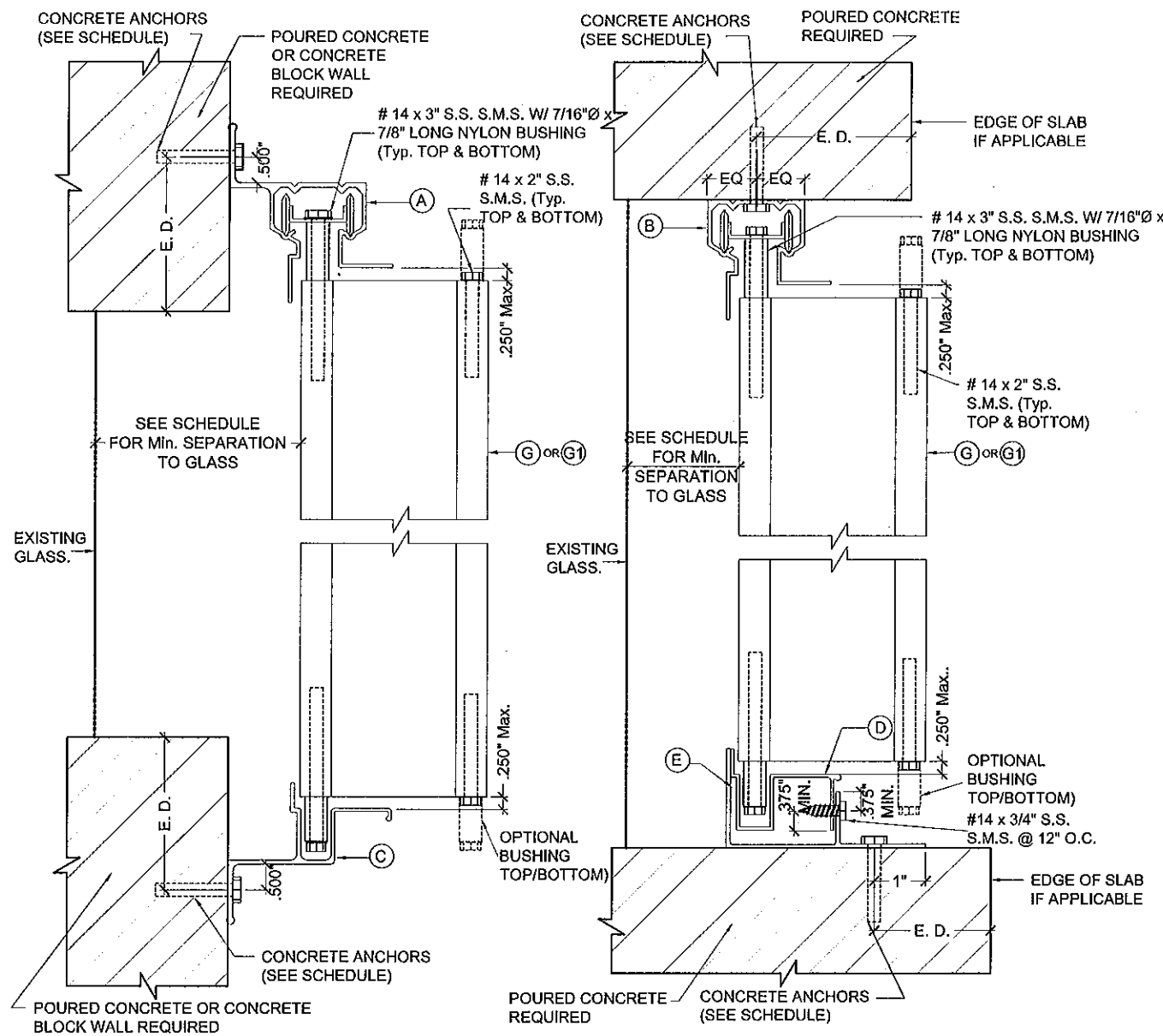
SYSTEM 2 ALUMINUM ACCORDION SHUTTER
FLORIDA STORM PANELS, INC.
(H.P.M.A. #2)
14475 NW 26 AVENUE
OPA LOCKA, FL 33054
Tel: (305) 685-9000 Fax: (305) 685-7511

DATE	05-13-2010
SCALE	
DRAWN	E.D.
PROJECT	10-04
DRAWING NO.	AD10-28
	3 OF 10

REVISIONS
NO. DATE DESCRIPTION
1 08/05/10 AS PER BCCO COMMENTS
2 03/16/12 UPDATED TO REC. 2010

MCY
MCY ENGINEERING, INC.
GLAZING CONSULTANTS
8501 SW 124 AVE. STE 205A P. 305.271.0117
MIAMI, FL 33183 F. 786.573.5063
www.MCYEngineering.com MCY.Engineering@Att.net

MAR 19 2012

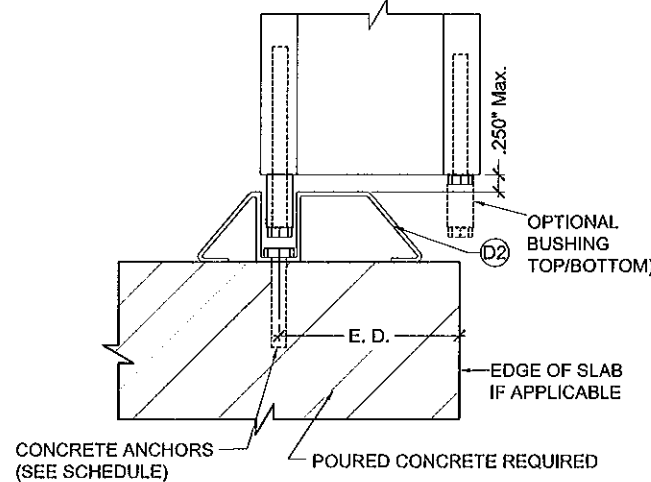


WALL MOUNTING INSTALLATION

SECTION A
SCALE: 3/8" = 1"

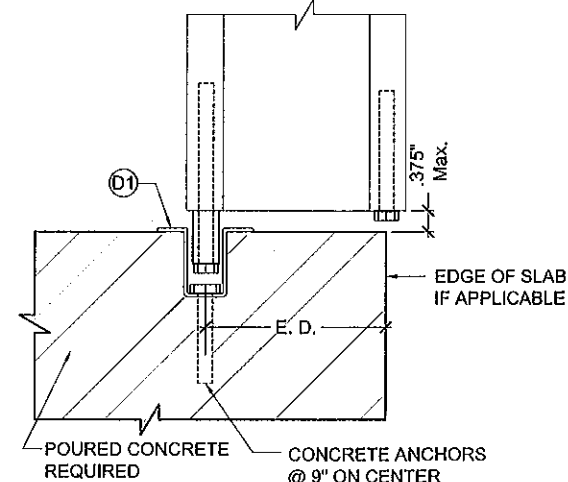
CEILING & FLOOR MOUNTING INSTALLATION

SECTION B
SCALE: 3/8" = 1"



FLOOR MOUNTING INSTALLATION

SECTION B1
SCALE: 3/8" = 1"



FLOOR MOUNTING INSTALLATION

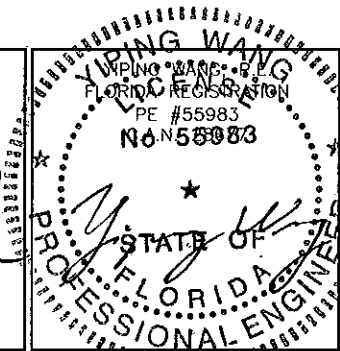
SECTION B2
SCALE: 3/8" = 1"

MAXIMUM DESIGN PRESSURE RATING "Pd" (PSF) AND CORRESPONDING
MAXIMUM ANCHOR SPACING (in.) SCHEDULE. +

MAXIMUM DESIGN LOAD "Pd" (PSF)	SHUTTER SPAN (in.)	SECTION A (TOP/BOTTOM)						SECTION B (TOP/BOTTOM) B1 (BOTTOM)		
		SUBSTRATE CONCRETE			SUBSTRATE BLOCK			SUBSTRATE CONCRETE		
		ANCHOR TYPE A	ANCHOR TYPE B	ANCHOR TYPE C	ANCHOR TYPE A1	ANCHOR TYPE B1	ANCHOR TYPE C1	ANCHOR TYPE A	ANCHOR TYPE B	ANCHOR TYPE C
60	60"	9	9	9	4.5	4	7	6	6	6
	78	9	9	9	3.5	3	5.5	6	6	6
	96	8	7.5	8	-	-	4.5	6	6	6
	120"	6	6	6.5	-	-	3.5	6	6	6
	144"	5	5	5.5	-	-	3	6	6	6
65	154"	5	4.5	5	-	-	-	6	6	6
	60"	9	9	9	4	3.5	6.5	6	6	6
	78	9	8.5	9	3	-	5	6	6	6
	96	7	7	7.5	-	-	4	6	6	6
	120"	5.5	5.5	6	-	-	3	6	6	6
70	148"	4.5	4.5	4.5	-	-	-	6	5.5	6
	60"	9	9	9	4	3.5	6	6	6	6
	78	8	8	8.5	3	-	4.5	6	6	6
	96	6.5	6.5	7	-	-	3.5	6	6	6
	120"	5.5	5	5.5	-	-	3	6	6	6
80	143"	4.5	4.5	4.5	-	-	-	5.5	5.5	6
	60"	9	9	9	3.5	3	5	6	6	6
	78	7	7	7.5	-	-	4	6	6	6
	96	6	5.5	6	-	-	3	6	6	6
100	120"	4.5	4.5	5	-	-	-	6	6	6
	134"	4	4	4.5	-	-	-	5.5	5	6
	60"	7.5	7.5	8	-	-	4	6	6	6
	78	5.5	5.5	6	-	-	3	6	6	6
195	96	4.5	4.5	5	-	-	-	6	6	6
	120"	3.5	3.5	4	-	-	-	5	4.5	6
	66"	3.5	3	3.5	-	-	-	4.5	4	5.5

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0326.11
Expiration Date 04/23/2016
By *[Signature]*
Miami Dade Product Control

MIAMI DADE COUNTY



DATE	05-13-2010
SCALE	
DRAWN	E.D.
PROJECT	10-04
DRAWING NO.	AD10-28
4 OF 10	

SYSTEM 2 ALUMINUM ACCORDION SHUTTER
FLORIDA STORM PANELS, INC.
(H.P.M.A. #2)

14475 NW 26 AVENUE
OPA LOCKA, FL 33054
Tel: (305) 685-9000 Fax: (305) 685-7511

MCY ENGINEERING, INC.
GLAZING CONSULTANTS

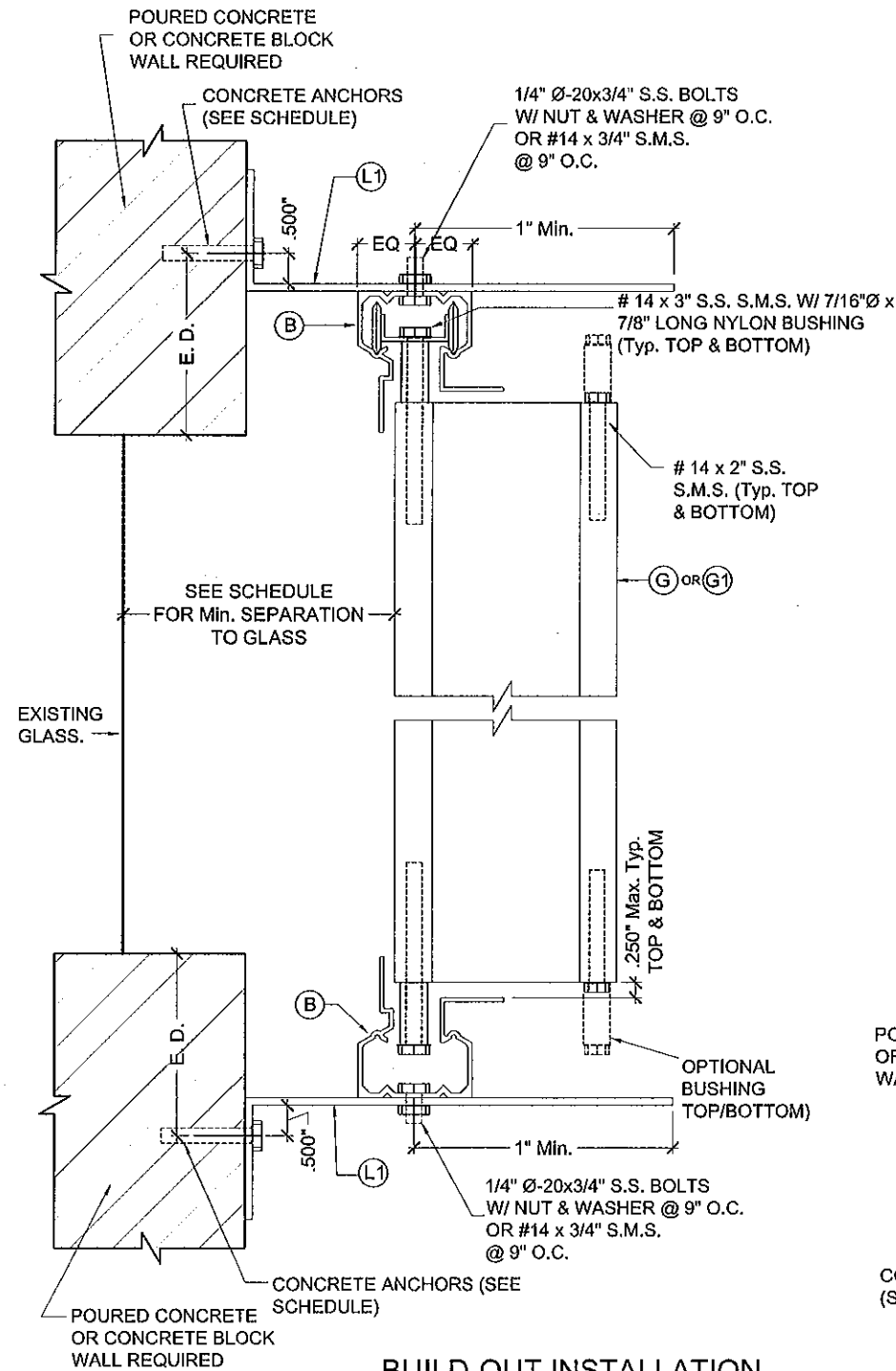
8501 SW 124 AVE. STE 205A P: 305.271.0117
MIAMI, FL 33183 F: 786.573.5063
www.MCYEngineering.com MCY.Engineering@Att.net

REVISIONS	NO. DATE DESCRIPTION
1	05/05/10 AS PER BCO COMMENTS
2	03/16/12 UPDATED TO FBC 2010

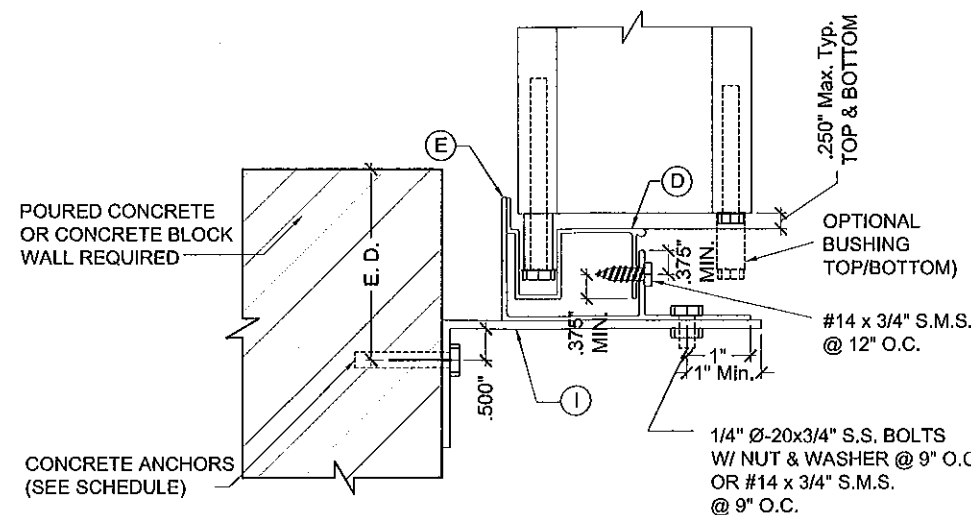
MAR 19 2012

MAXIMUM DESIGN PRESSURE RATING "Pd" (PSF) AND CORRESPONDING
MAXIMUM ANCHOR SPACING (in.) SCHEDULE. +

MAXIMUM DESIGN LOAD "Pd" (PSF)	SHUTTER SPAN (INCH)	SECTION C TOP/BOTTOM						SECTION C1 BOTTOM					
		SUBSTRATE CONCRETE			SUBSTRATE BLOCK			SUBSTRATE CONCRETE			SUBSTRATE BLOCK		
		ANCHOR TYPE A	ANCHOR TYPE B	ANCHOR TYPE C	ANCHOR TYPE A1	ANCHOR TYPE B1	ANCHOR TYPE C1	ANCHOR TYPE A	ANCHOR TYPE B	ANCHOR TYPE C	ANCHOR TYPE A1	ANCHOR TYPE B1	ANCHOR TYPE C1
60	60"	6	6	6	6	5.5	6	6	6	6	6	6	6
	78"	6	6	6	5	4.5	6	6	6	6	5.5	4.5	6
	96"	6	6	6	4	3.5	6	6	6	6	4.5	4	6
	120"	6	6	6	3	-	5	6	6	6	3.5	3	5.5
	144"	6	6	6	-	-	4	6	6	6	-	-	4.5
	154"	6	6	6	-	-	4	6	6	6	-	-	4
65	60"	6	6	6	6	5	6	6	6	6	5.5	6	6
	78"	6	6	6	4.5	4	6	6	6	6	5	4.5	6
	96"	6	6	6	3.5	3	5.5	6	6	6	4	3.5	6
	120"	6	6	6	3	-	4.5	6	6	6	3	-	5
	148"	6	6	6	-	-	3.5	6	6	6	-	-	4
70	60"	6	6	6	5.5	5	8.5	6	6	6	6	5.5	6
	78"	6	6	6	4	3.5	6.5	6	6	6	4.5	4	6
	96"	6	6	6	3.5	3	5.5	6	6	6	3.5	3	6
	120"	6	6	6	-	-	4	6	6	6	3	-	4.5
	143"	6	6	6	-	-	3.5	6	6	6	-	-	4
80	60"	6	6	6	4.5	4	7.5	6	6	6	5	4.5	6
	78"	6	6	6	3.5	3	5.5	6	6	6	4	3.5	6
	96"	6	6	6	3	-	4.5	6	6	6	3	3	5
	120"	6	6	6	-	-	3.5	6	6	6	-	-	4
	134"	6	5.5	6	-	-	3	6	6	6	-	-	3.5
100	60"	6	6	6	3.5	3.5	6	6	6	6	4	3.5	6
	78"	6	6	6	3	-	4.5	6	6	6	3	-	5
	96"	6	6	6	-	-	3.5	6	6	6	-	-	4
	120"	5	5	5.5	-	-	3	5	5.5	6	-	-	3
195	60"	5	5	5.5	-	-	3	5	5.5	6	-	-	3
	66"	4.5	4.5	5	-	-	-	5	5	5.5	-	-	3

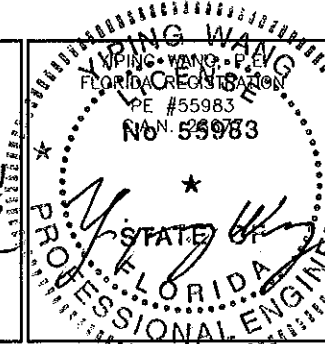


BUILD-OUT INSTALLATION
SECTION C



BUILD-OUT INSTALLATION
SECTION C1

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0326.11
Expiration Date 04/23/2016
By *[Signature]*
Miami Dade Product Control



DATE 05-13-2010
SCALE
DRAWN E.D.
PROJECT 1001
DRAWING NO. AD10-28

5 OF 10

REVISIONS

NO.	DATE	DESCRIPTION
1	09/05/10	AS PER EDCO COMMENTS
2	03/16/12	UPDATED TO FBC 2010

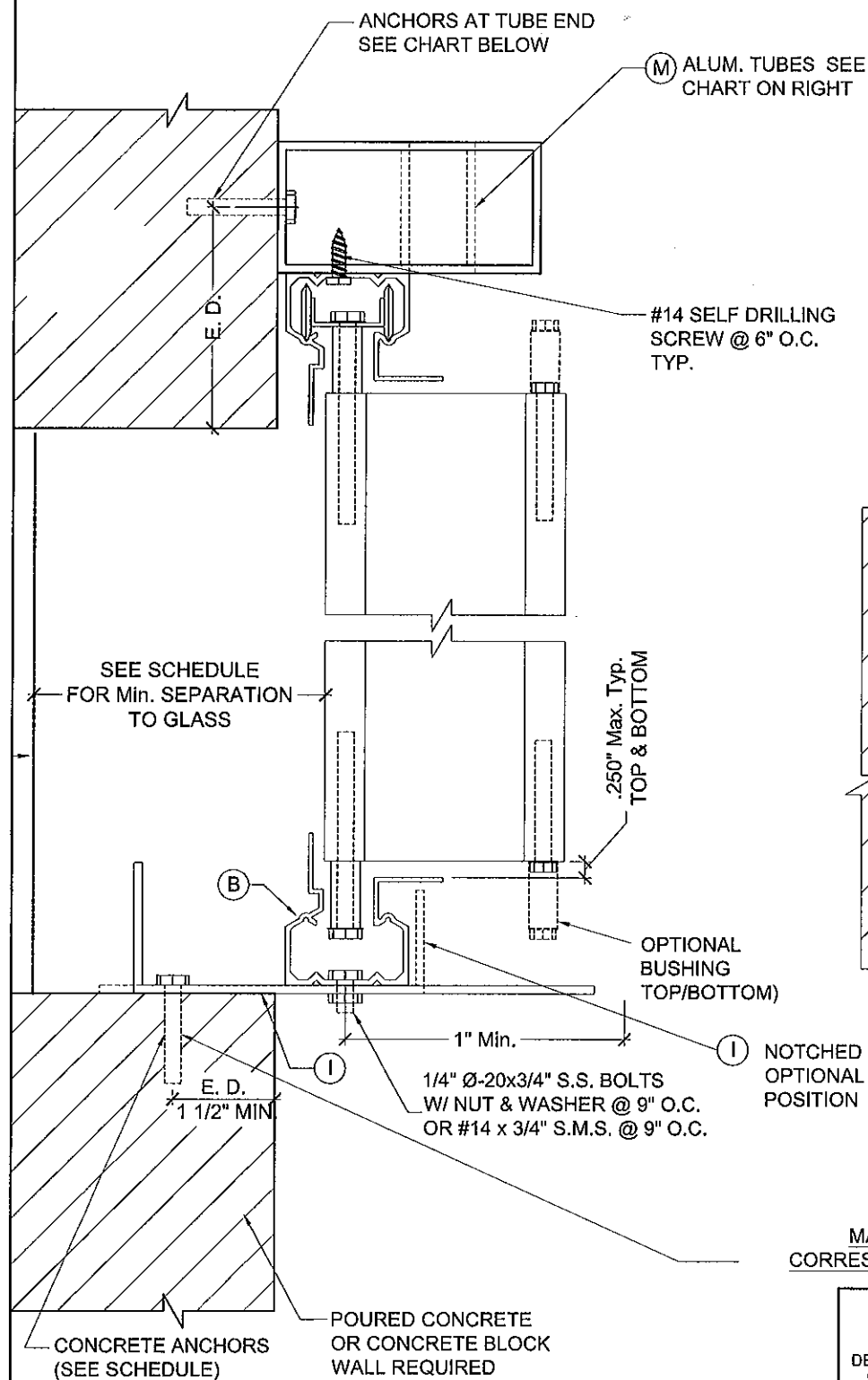
MCY

MCY ENGINEERING, INC.
GLAZING CONSULTANTS

8501 SW 124 AVE. STE 205A P. 305.271.0117
MIAMI, FL 33183 F. 786.573.5063
www.MCYEngineering.com MCY.Engineering@Att.net

SYSTEM 2 ALUMINUM ACCORDION SHUTTER
FLORIDA STORM PANELS, INC.
(H.P.M.A. #2)
14475 NW 26 AVENUE
OPA LOCKA, FL 33054
Tel: (305) 685-9000 Fax: (305) 685-7511

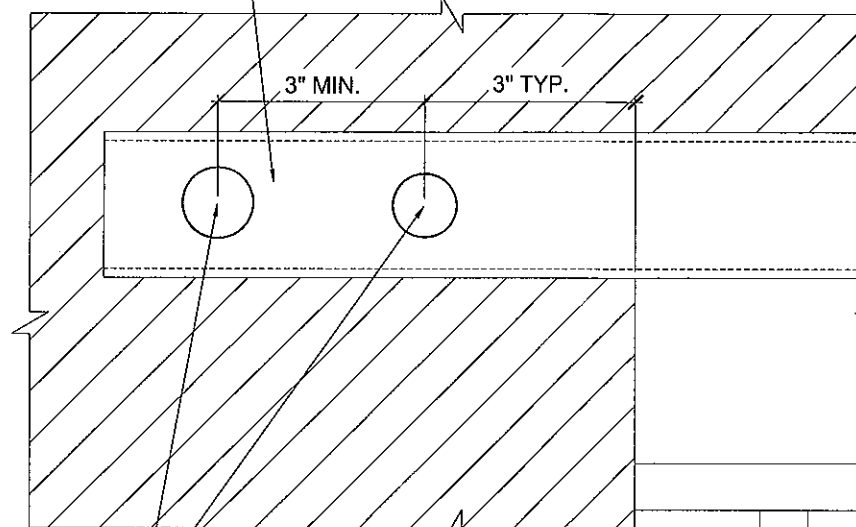
MAR 19 2012



BUILD-OUT INSTALLATION SECTION M

ALUM. TUBE SIZE	OPEN'G WIDTH	MAX. HEIGHT	DESIGN LOAD (PSF)	
			ANCHOR TYPE "A"	ANCHOR TYPE "C"
2"x2"x1/8"	42"	88"	65	65
2"x3"x1/8"	60"	88"	65	65
2"x4"x1/8"	78"	88"	57.3	62
	78"	84"	60	65
	78"	77"	65	65

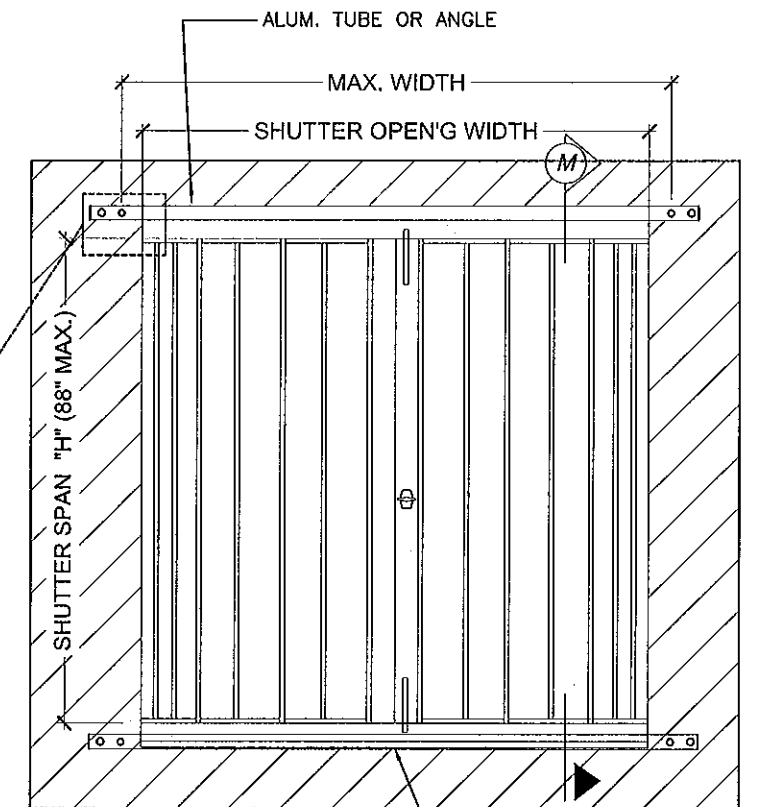
MAX. DESIGN LOAD FOR TUBE SIZES &
ANCHOR TYPE USED SEE CHART ABOVE



OPTIONAL: FOR ANCHOR INTO GROUT FILLED CONCRETE BLOCK
fcm'=>1500 PSI USE (2) - 3/8" KWIK- BOLT 2 1/2" MIN. EMBED INTO
CONCRETE BLOCK 4" MIN. EDGE DIST. AND 4" SPACING

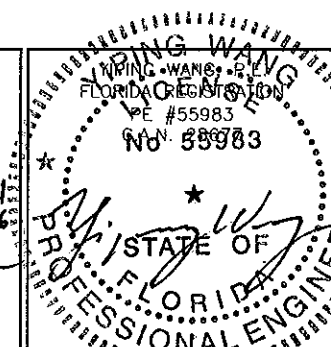
MAXIMUM DESIGN PRESSURE RATING "Pd" (PSF) AND
CORRESPONDING MAXIMUM ANCHOR SPACING (in.) SCHEDULE. +

MAXIMUM DESIGN LOAD "Pd" (PSF)	SHUTTER SPAN (INCH)	SECTION M BOTTOM	
		SUBSTRATE CONCRETE	
		ANCHOR SPACING (in.)	
		ANCHOR TYPE A	ANCHOR TYPE C
65	60"	8.5	9
	72"	7	7.5
	84"	6	6.5
	88"	5.5	6



TOP / BOTTOM (OPTIONAL)

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0326-11
Expiration Date 04/23/2016
By *Heidi A. Miller*
Miami Dade Product Control



MIAMI DADE COUNTY

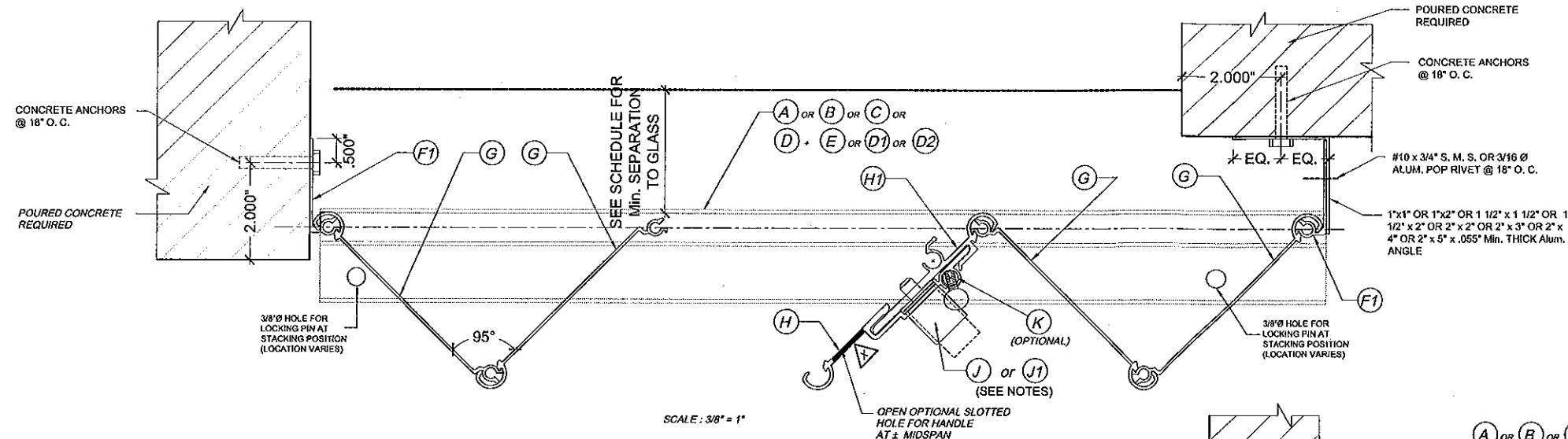
NO	DATE	DESCRIPTION
1	08/06/10	AS PER ECCO COMMENTS
2	03/16/12	UPDATED TO FBC 2010

MCY
MCY ENGINEERING, INC.
GLAZING CONSULTANTS
8501 SW 124 AVE. STE 205A P. 305.271.0117
MIAMI, FL 33183 F. 786.573.5063
www.MCYEngineering.com MCY.Engineering@Att.net

SYSTEM 2 ALUMINUM ACCORDION SHUTTER
FLORIDA STORM PANELS, INC.
(H.P.M.A. #2)
14475 NW 26 AVENUE
OPA LOCKA, FL 33054
Tel: (305) 685-9000 Fax: (305) 685-7511

DATE	05-13-2010
SCALE	
DRAWN	E.D.
CHECKED	10-04
DRAWING NO.	AD10-28
	6 OF 10

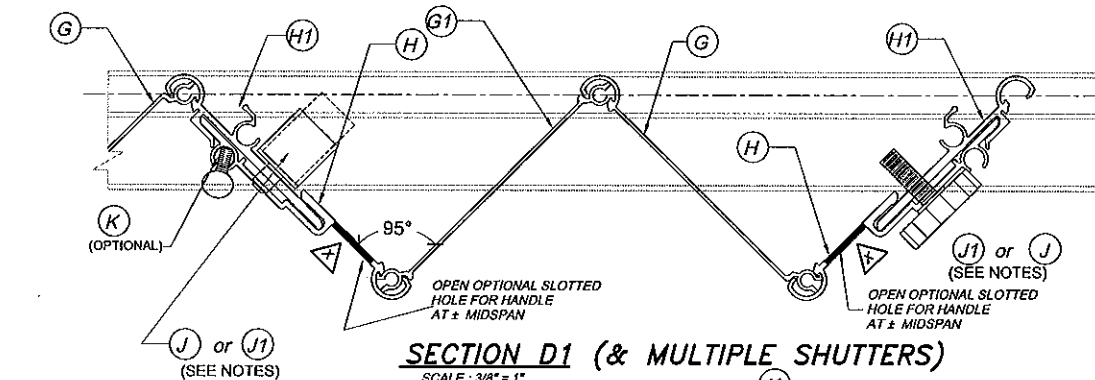
MAR 19 2012



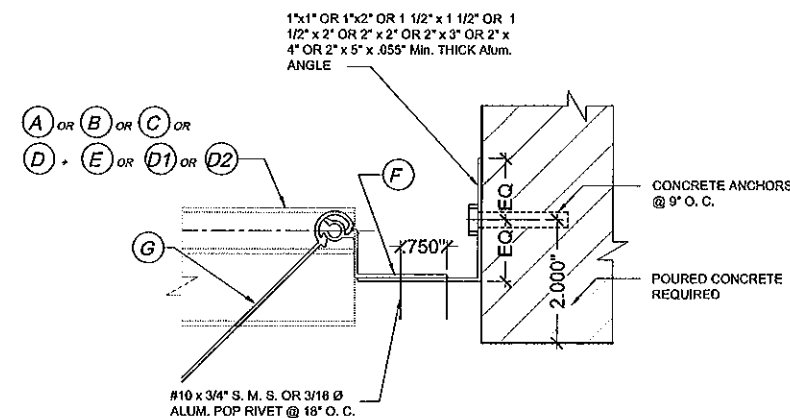
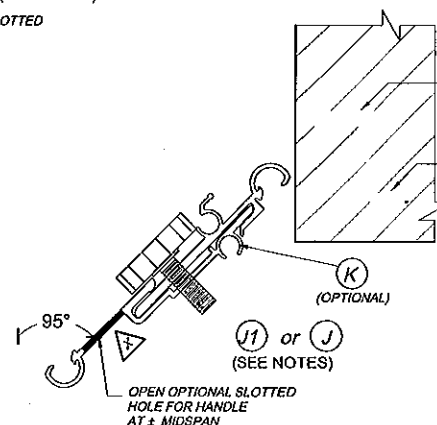
NOTES FOR LOCKING OF (H) & (I)

1-PUSH BOTTOM LOCK (I) MAY BE USED FOR INSTALLATIONS SECURED FROM THE OUTSIDE OR INSIDE OF SHUTTER. WHEN INSTALLING (I) FROM THE OUTSIDE, A 7/8" Ø HOLE SHALL BE DRILLED AT (H) AND (I) MUST BE RIVETED FROM THE BACK OF (H) TO THE FRONT W/ (2) 3/16" Ø ALUM. POP RIVETS. A 3/8" Ø HOLE MUST THEN BE DRILLED AT (I) TO ALLOW FOR (I)'S PIN TO PASS THRU. WHEN INSTALLING (I) FROM THE INSIDE, (I) MUST BE RIVETED TO (H) W/ (2) 3/16" Ø ALUM. POP RIVETS. A 3/8" Ø HOLE MUST THEN BE DRILLED THRU (H) AND (I) TO ALLOW FOR (I)'S PIN TO PASS THRU.

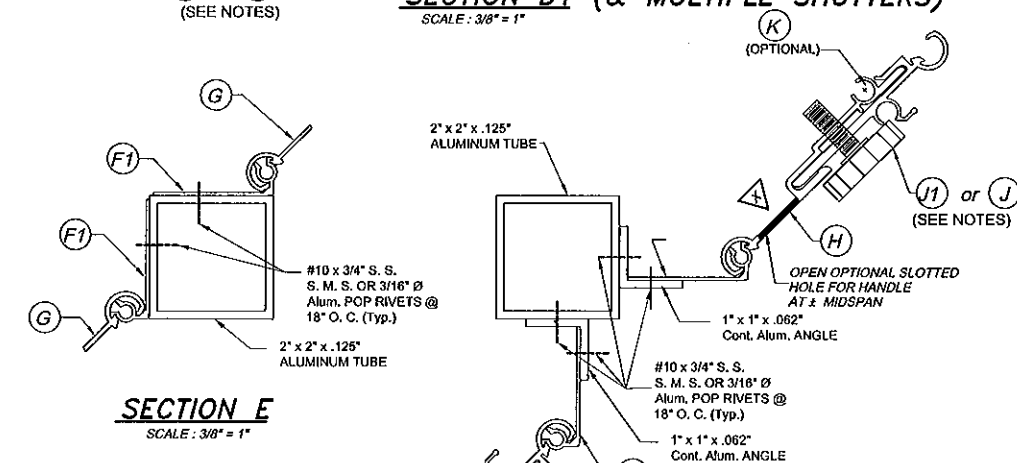
2-5/16"x1" LOCK (H) MAY BE USED ALTERNATIVELY TO (I) LOCK FOR INSTALLATIONS SECURED FROM THE OUTSIDE OR INSIDE OF SHUTTER. IN THIS CASE, A 5/16" Ø HOLE SHALL BE DRILLED THRU (H) AND (I). HOLE DRILLED TO (H) SHALL BE TAPPED TO ACCEPT 18 THREADS PER INCH MACHINE SCREW.



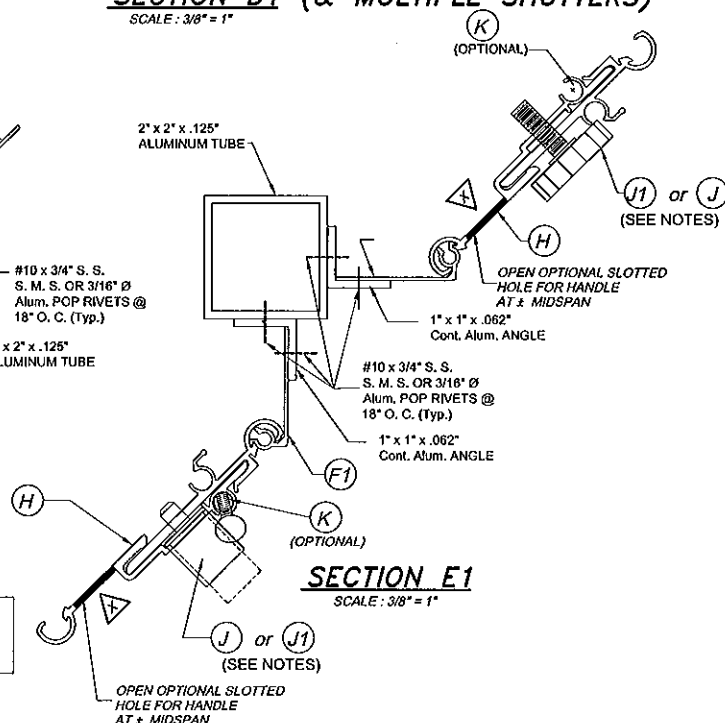
ONE SIDED SECTION : END CONNECTION DETAIL



ALTERNATE CLOSURE DETAIL W / (F)



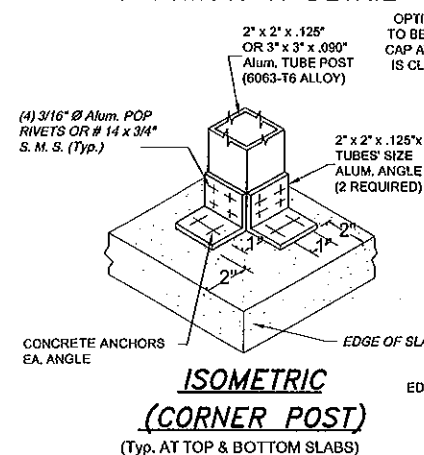
SECTION E
SCALE: 3/8" = 1"



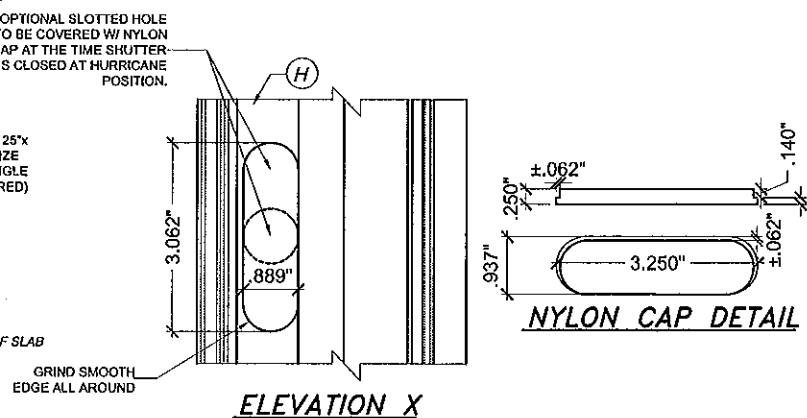
SECTION E1
SCALE: 3/8" = 1"

NOTE:
SECTIONS SHOWN CAN BE COMBINED TO SUIT ANY INSTALLATION.

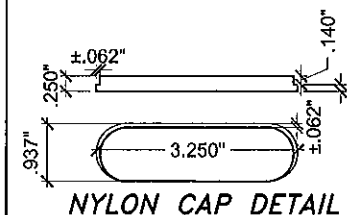
SE
SCALE: 3/8" = 1"



ISOMETRIC (CORNER POST)
(Typ. AT TOP & BOTTOM SLABS)

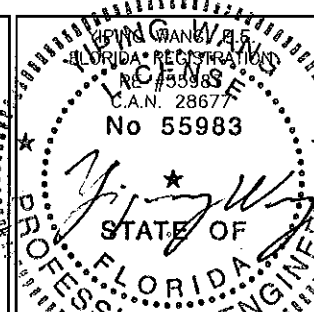


ELEVATION X



NYLON CAP DETAIL

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 12-0326-11
Expiration Date 04/23/2016
By *[Signature]*
Miami Dade Product Control



DATE	05-13-2010
SCALE	
DRAWN	E.D.
PROJECT	10-04
DRAWING NO.	AD10-28
	7 OF 10

SYSTEM 2 ALUMINUM ACCORDION SHUTTER

FLORIDA STORM PANELS, INC.

(H.P.M.A. #2)
14475 NW 26 AVENUE
OPA LOCKA, FL 33054

Tel: (305) 685-9000 Fax: (305) 685-7511

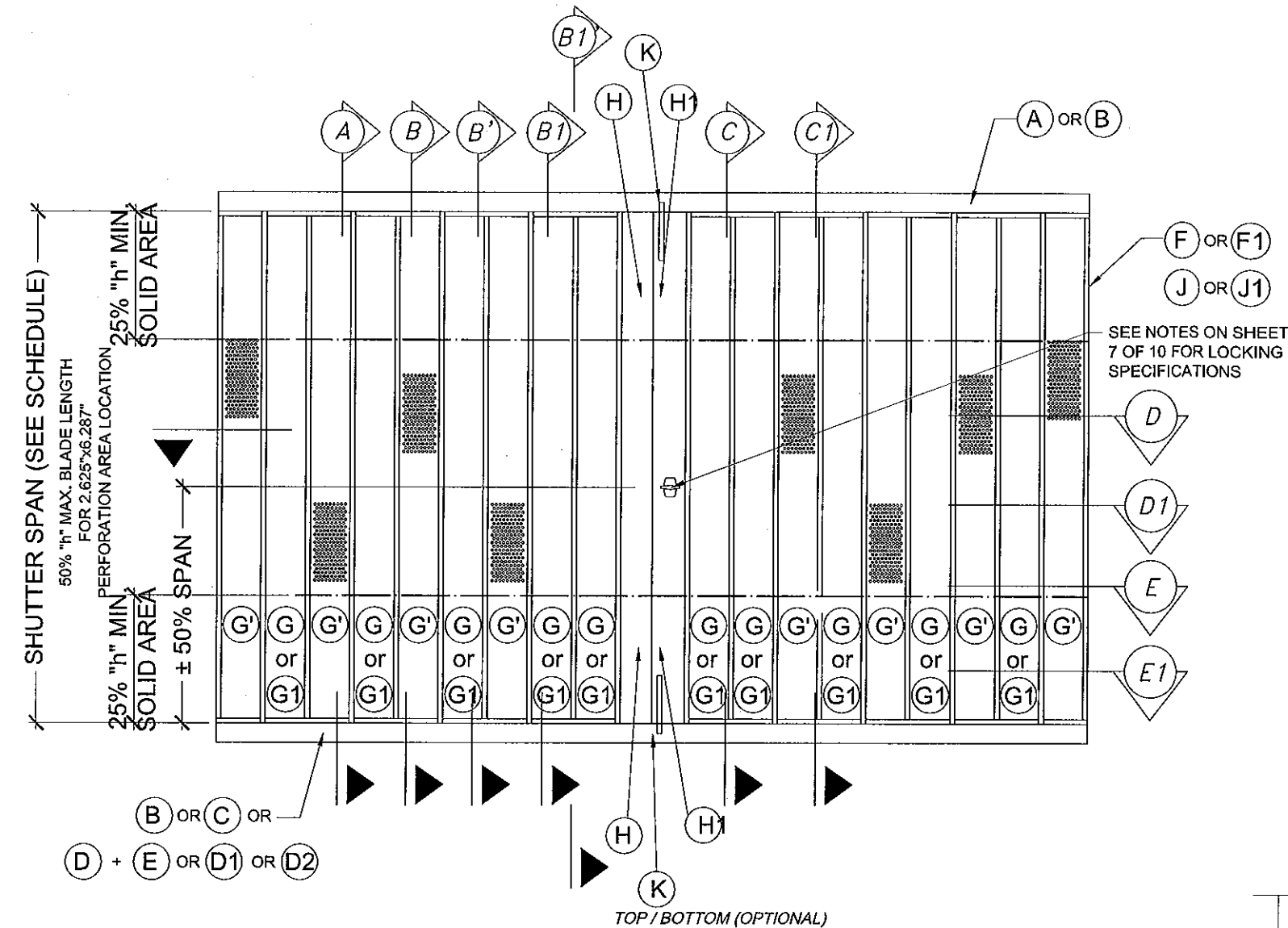
MCY ENGINEERING, INC.
GLAZING CONSULTANTS

8501 SW 124 AVE. STE 205A P. 305.271.0117
MIAMI, FL 33183 F. 786.573.5063

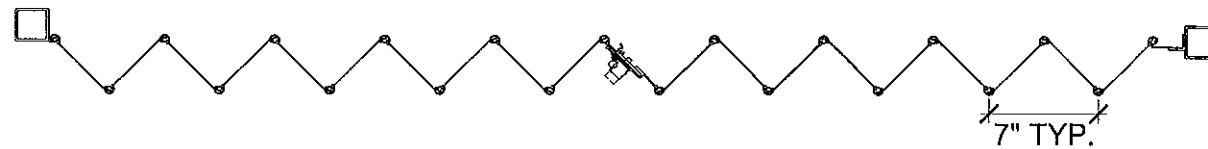
www.MCYEngineering.com MCY.Engineering@att.net

NO	DATE	DESCRIPTION
1	08/05/10	AS PER ECCO COMMENTS
2	03/16/12	UPDATED TO FBC 2010

MAR 19 2012



TYPICAL ELEVATION



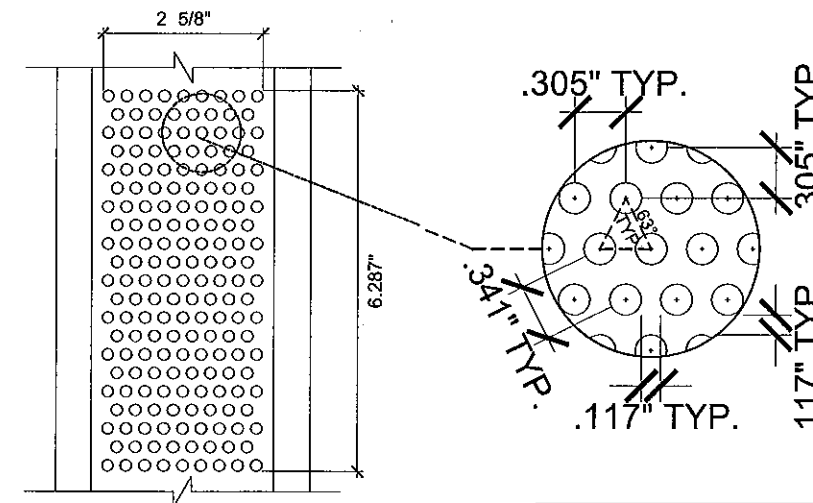
TYPICAL SHUTTER PLAN

GENERAL LIMITATIONS AND CONDITIONS OF USE FOR
G OR G1 BLADE ACCORDIAN SHUTTER SYSTEM
WORKING IN UNISON WITH G' BLADES.

1. MAXIMUM SHUTTER SPAN AND PRESSURE RATING, MAXIMUM ANCHOR SPACING AND MINIMUM SEPARATION TO GLASS FOR G' AND G1 WORKING IN UNISON WITH G AND G1 ARE AS PER SCHEDULES ON SHEET 3, 4, 5 & 9.
2. MAXIMUM PERFORATION AREA AT G', G1 IS $\pm 2.625" \times 6.287"$ AND MUST BE LOCATED WITHIN THE CENTRAL 50% OF THE BLADE SPAN.

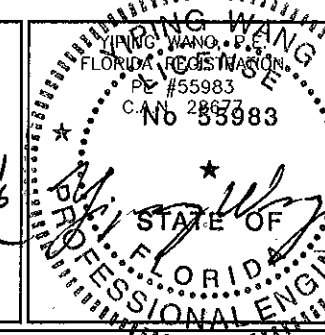
PERFORATED BLADES G, G1 MUST BE SOLID AT THE TOP AND BOTTOM 25% OF BLADES SPAN.
3. PERFORATED BLADES G', G1 SHALL BE INSTALLED AT EVERY OTHER BLADE (FREQUENCY).
4. CENTERMATES H, H1 MUST ALWAYS BE ACCOMPANIED BY TWO SOLID BLADES G, G1 AT EITHER SIDE OF EACH CENTERMATE.
5. STARTERS AND CENTERMATES MUST BE ALWAYS SOLID.
6. STARTERS CONNECTION TO EXISTING BUILDING OR TO END/CORNER TUBES MUST BE AS PER DETAILS INDICATED ON SHEET 7.

SECTION S-S THRU G MALE/FEMALE BLADE



TYPICAL G' PERFORATED
BLADE ELEVATION

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 2-0326.11
Expiration Date 04/23/2016
By *[Signature]*
Miami Dade Product Control



DATE	05-13-2010
SCALE	
DRAWN	E.O.
PROJECT	10-04
DRAWING NO.	AD10-28

REVISIONS

NO	DATE	DESCRIPTION
1	03/06/10	AS PER BCCO COMMENTS
2	03/16/12	UPDATED TO FBC 2010

MCY

MCY ENGINEERING, INC.
GLAZING CONSULTANTS

8501 SW 124 AVE. STE 205A P: 305.271.0117
MIAMI, FL 33183 F: 786.573.5063

www.MCYEngineering.com MCY.Engineering@Att.net

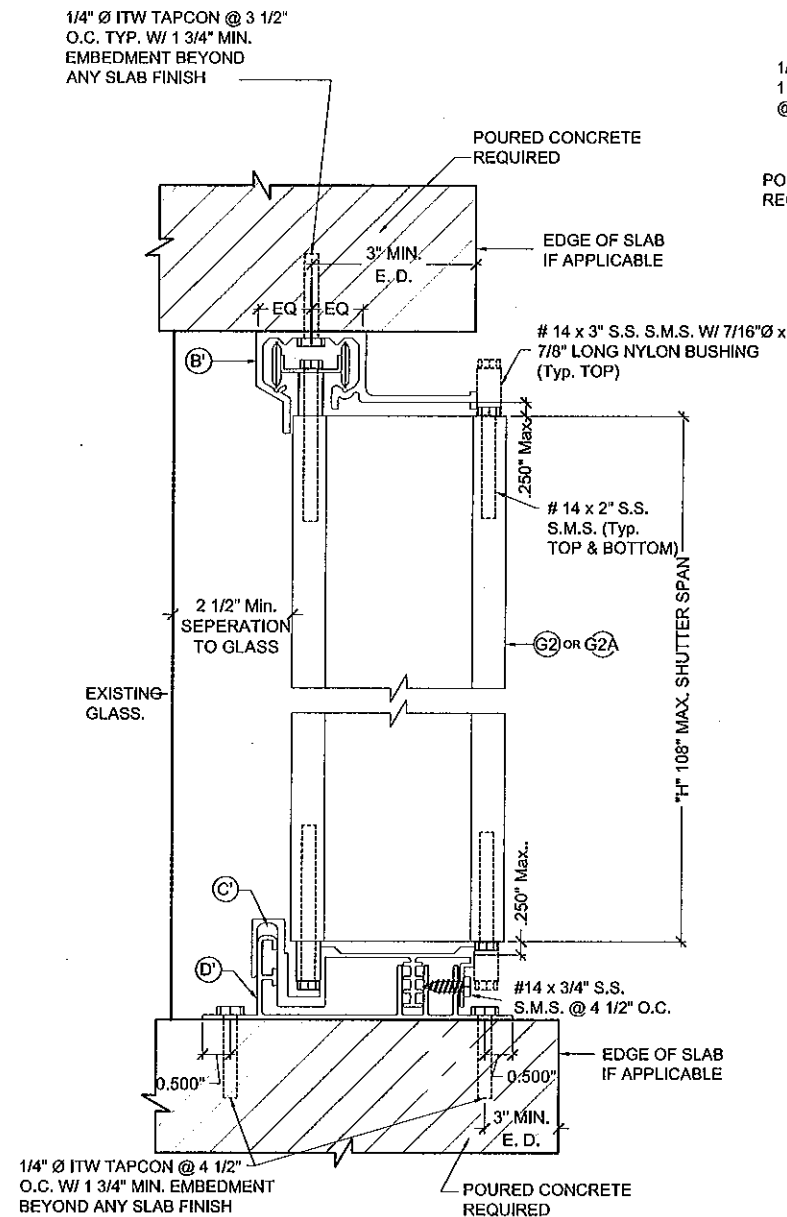
SYSTEM 2 ALUMINUM ACCORDION SHUTTER

FLORIDA STORM PANELS, INC.
(H.P.M.A. #2)

14475 NW 26 AVENUE
OPA LOCKA, FL 33054

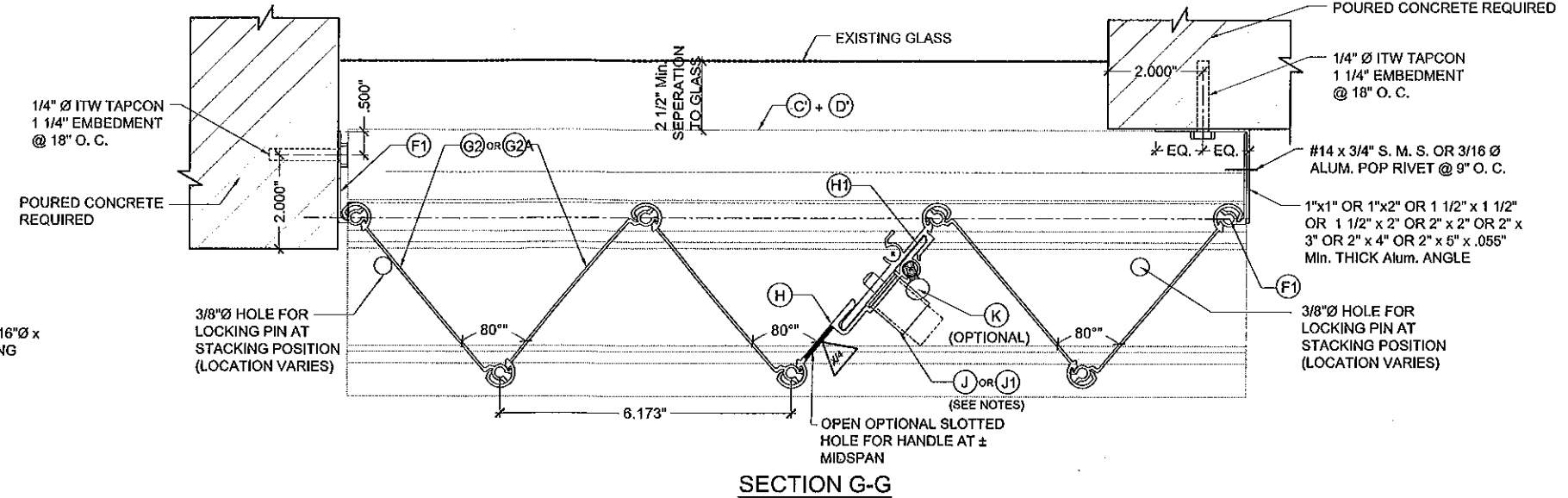
Tel: (305) 685-9000 Fax: (305) 685-7511

SPECIAL HI-PRESSURE RATING FOR FLOOR TO CEILING INSTALLATIONS W/ B', C', D' TRACKS & BLADES G2, G2A

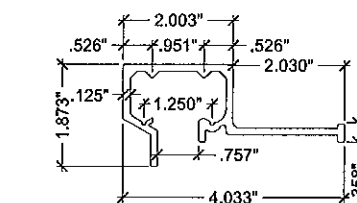


CEILING & FLOOR
MOUNTING INSTALLATION
SECTION F

SCALE: 3/8" = 1"

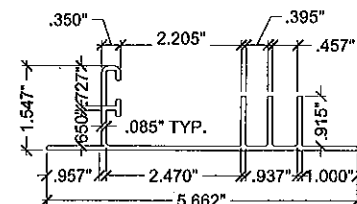


SECTION G-G



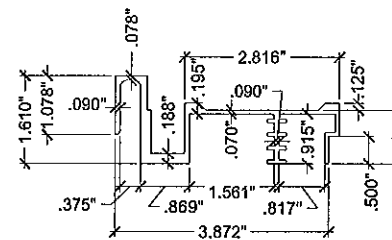
B' HEAVY DUTY CEILING
HEADER

6063-T6 ALLOY



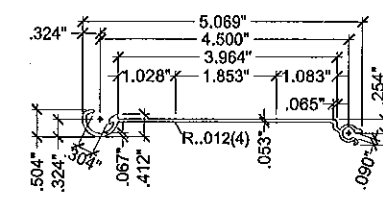
D' HEAVY DUTY ADJUSTABLE
SILL ADAPTOR

SCALE: 3/8" = 1"



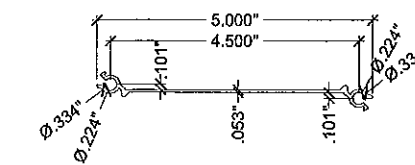
C' HEAVY DUTY SILL

6063-T6 ALLOY



G2 MALE/FEMALE SOLID BLADE

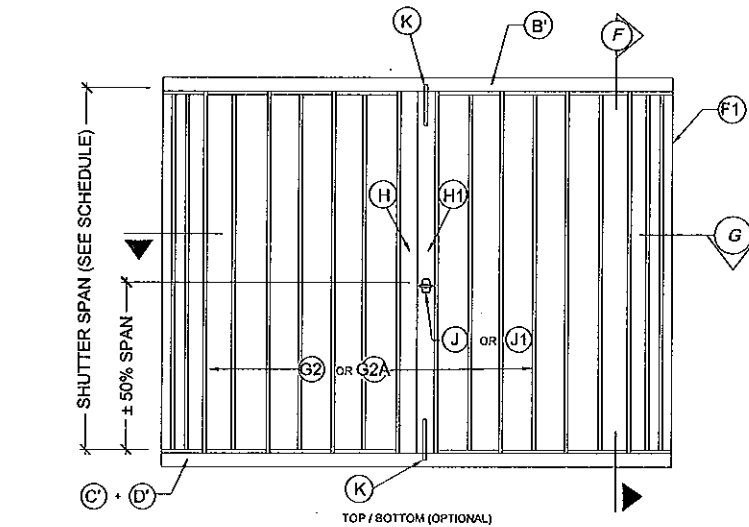
6063-T6 ALLOY



G2A MALE/MALE SOLID BLADE

6063-T6 ALLOY

COMPONENTS

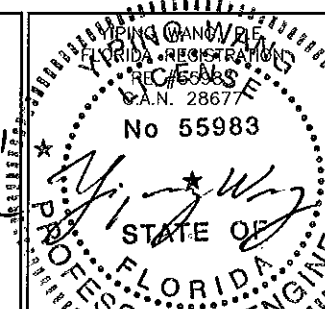


TYPICAL ELEVATION WITH G2 AND G2A SOLID BLADE
HEAVY DUTY SYSTEM

DESIGN LOAD:
MAX Pd = + 120.0 psf
- 138.7 psf

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0326.11
Expiration Date 04/23/2016
By *Heidi A. Miller*
Miami Dade Product Control

MIAMI DADE COUNTY



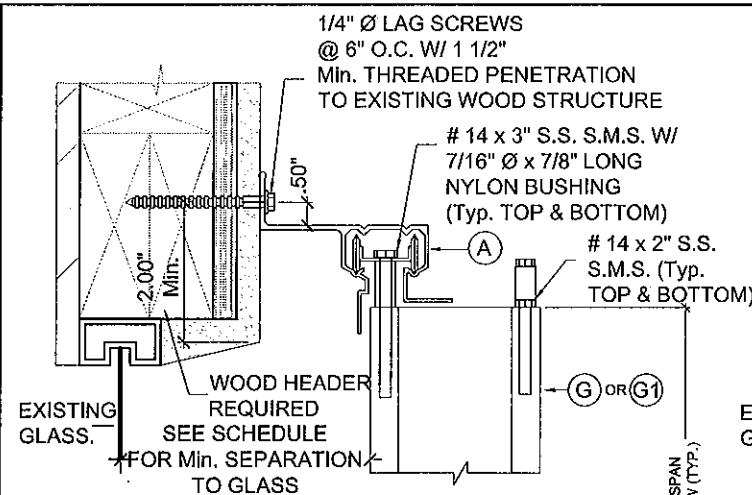
DATE	05-13-2010
SCALE	
DRAWN	E.D.
PROJECT	10-04
DRAWING NO.	AD10-28
	9 OF 10

SYSTEM 2 ALUMINUM ACCORDION SHUTTER
FLORIDA STORM PANELS, INC.
(H.P.M.A. #2)
14475 NW 26 AVENUE
OPA LOCKA, FL 33054
Tel: (305) 685-9000 Fax: (305) 685-7511

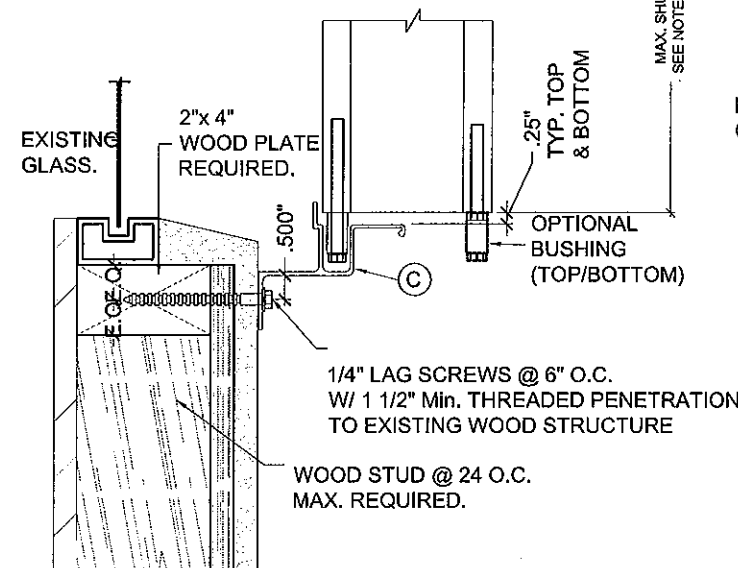
MCY ENGINEERING, INC.
GLAZING CONSULTANTS
8501 SW 124 AVE. STE 205A P: 305.271.0117
MIAMI, FL 33183 F: 786.573.5063
www.MCYEngineering.com MCY.Engineering@Att.net

NO	DATE	DESCRIPTION
1	05/13/10	AS PER DCC COMMENTS
2	09/16/12	UPDATED TO FBC 2010

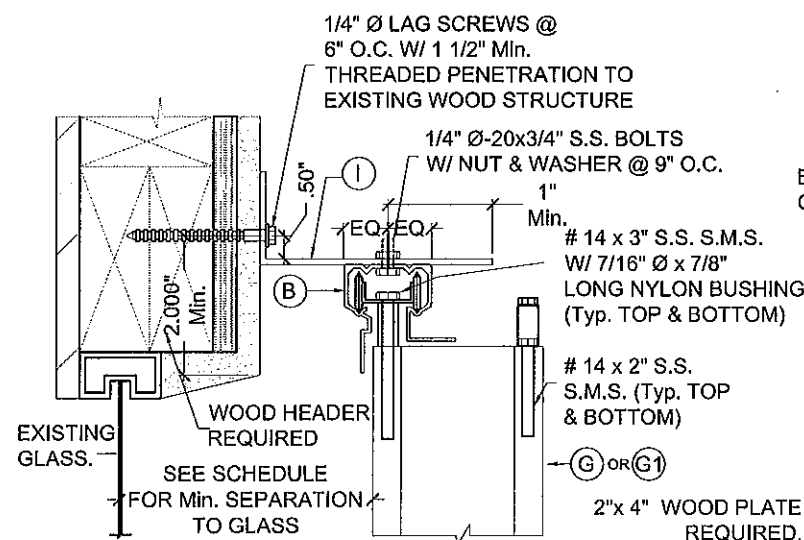
MAR 19 2012



ALTERNATIVE 1



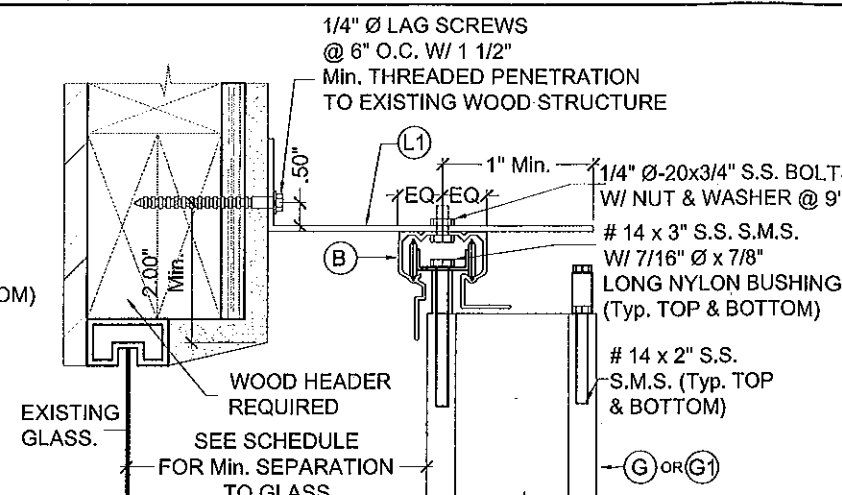
ALTERNATIVE 2



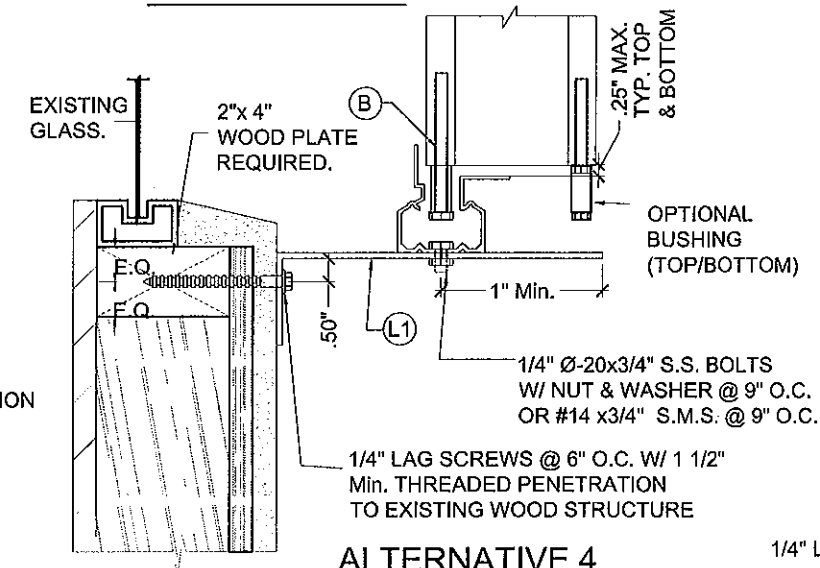
ALTERNATIVE 5

WALL MOUNTING INSTALLATION (OFFSET)

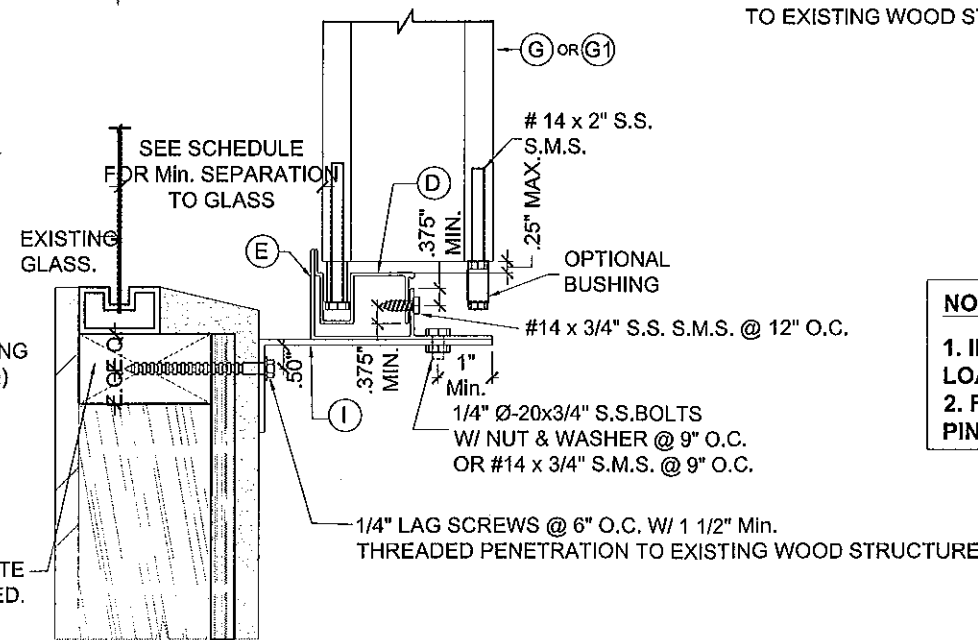
SECTIONS A
SCALE: 1/4"=1"
INSTALLATION DETAILS ON EXISTING WOOD BUILDINGS



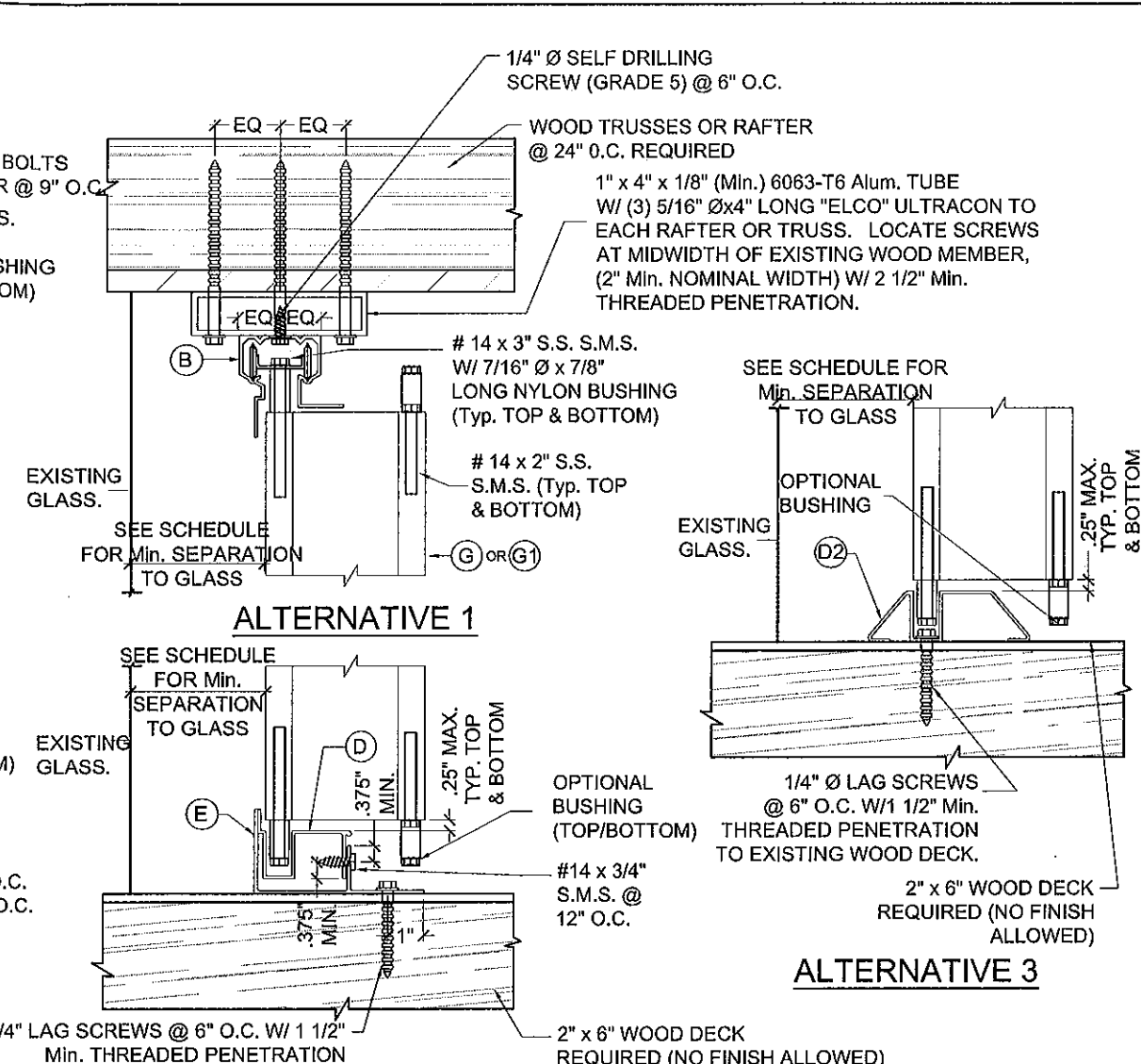
ALTERNATIVE 3



ALTERNATIVE 4



ALTERNATIVE 6



ALTERNATIVE 1

1/4" LAG SCREWS @ 6" O.C. W/ 1 1/2" Min. THREADED PENETRATION TO EXISTING WOOD STRUCTURE

2" x 6" WOOD DECK REQUIRED (NO FINISH ALLOWED)

ALTERNATIVE 2

WALL MOUNTING INSTALLATION (OFFSET)

SECTIONS B
SCALE: 1/4"=1"

NOTE:
WALL/FLOOR/CEILING MOUNTING SECTIONS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

NOTES:
1. INSTALLATIONS ARE ONLY VALID FOR INSTALLATIONS WITH DESIGN WIND LOADS LESS THAN OR EQUAL TO 75 p.s.f. AND 9'-0" Max. SHUTTER SPAN.
2. FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

PRODUCT REVISED as complying with the Florida Building Code
Acceptance No 12-0326-11
Expiration Date 04/23/2016
By *[Signature]*
Miami Dade Product Control

MIAMI DADE COUNTY

STATE OF FLORIDA
Professional Engineer
No 55983
C.A.N. 28677

DATE 05-13-2010
SCALE
DRAWN E.O.
PROJECT 10-04
DRAWING NO. AD10-28
10 OF 10

REVISIONS

NO.	DATE	DESCRIPTION
1	08/05/10	AS PER BCO COMMENTS
2	03/16/12	UPDATED TO FBC 2010

MCY ENGINEERING, INC.
GLAZING CONSULTANTS

8501 SW 124 AVE. STE 205A P: 305.271.0117
MIAMI, FL 33183 F: 786.573.5063

www.MCYEngineering.com MCY.Engineering@att.net

SYSTEM 2 ALUMINUM ACCORDION SHUTTER
FLORIDA STORM PANELS, INC.
(H.P.M.A. #2)
14475 NW 26 AVENUE
OPA LOCKA, FL 33054
Tel: (305) 685-9000 Fax: (305) 685-7511

MAR 19 2012